

REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 1-5, 9-27 and 31-61 are currently pending in this application.

Interview Summary, Required Under 37 CFR 1.133(b)

On April 1, 2004, Applicant's representative (the undersigned) participated in a telephonic interview (which Applicant's representative requested) with Examiner M. Rahmjoo and his supervisor, M. Bella. Applicant's representative thanks Mr. Rahmjoo and Mr. Bella for the courtesies extended during that interview.

In the interview, Applicant's representative presented a copy of the above-identified set of amended claims. Applicant's representative focused primarily on claim 1, and the documents applied against this claim, namely, U.S. Patent No. 5,191,645 to Carlucci et al. (referred to below as "Carlucci"), and U.S. Patent No. 5,646,651 to Spannaus et al. (referred to below as "Spannaus"). More specifically, Applicant's representative first assisted Mr. Rahmjoo and Mr. Bella in the interpretation of the elements of claim 1. Applicant's representative then argued that the applied documents failed to render this claim obvious, whether considered alone or in combination. Applicant's representative also pointed out that other claims recited additional elements (compared to claim 1), and, accordingly, these claims further distinguished over the applied documents.

Mr. Rahmjoo and Mr. Bella stated that they understood the presented arguments, but they indicated that they would require further review of the case before reaching a conclusion regarding the allowability of the claims. Mr. Rahmjoo and Mr. Bella suggested that Applicant's representative submit a formal Amendment for their consideration.

1 To this end, Applicant submits the present Response. This Response repeats the
2 claim amendments that were presented in the April 1, 2004 interview. It is submitted that
3 these claims are allowable over the applied documents for reasons specified below.
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5 *Withdrawal of the Rejection Under 35 U.S.C. § 103(a) Based on Carlucci and*
6 *Spannaus is Appropriate and is Respectfully Requested.*

7 Claims 1-5, 9-21, 23-27 and 31-45 were rejected under 35 U.S.C. § 103(a) as
8 being unpatentable over Carlucci in view of Spannaus. Applicant respectfully traverses
9 this rejection for the following reasons.

10 As amended, independent claim 1 recites a video output system for producing
11 video signals within a video graphics workstation. The video output system comprises a
12 receiver for receiving a video signal forwarded from a video signal source within the
13 video graphics workstation. The video output system also comprises a video pipeline for
14 post-processing the received video signal, the video pipeline producing a post-processed
15 video signal. The video output system also comprises a video output module for
16 converting the post-processed video signal, the video output module producing a
17 formatted video signal. The claim further recites that the video output system is
18 configured to receive the received video signal from a storage medium, a video graphics
19 processor, and a video input system, wherein the video output system is communicatively
20 coupled to the storage medium, the graphics processor, and the video input system by
21 electrical communication paths.

22 Carlucci does not teach or suggest the above-described recitations of claim 1. For
23 instance, Carlucci does not teach or suggest a video output system that is configured to
24 receive a video signal from a storage medium, a video graphics processor, and a video
25 input system, wherein the video output system is communicatively coupled to the storage




1 medium, the graphics processor, and the video input system by electrical communication
2 paths.

3 The Office Action interprets the claimed "receiver" as Carlucci's input processor
4 70, the claimed "video pipeline" as Carlucci's digital signal processor 72, and the
5 claimed "video output module" as Carlucci's output processor 74. In an apparent
6 alternative interpretation, the Office Action also interprets the claimed "receiver" as
7 Carlucci's filter 100 of the input processor 70, the claimed "video pipeline" as Carlucci's
8 A/D converter 102 of the input processor 70, and the claimed "video output module" as
9 Carlucci's frame buffers (104, 106, 108) of the input processor 70. However, these
10 features do not satisfy the recitations identified above.

11 For instance, Carlucci's input processor 70 (which is being interpreted by the
12 Office Action as the recited receiver) receives an analog input signal *only* from a camera
13 processor 12. Camera processor 12, in turn, functions by imaging film frames adjacent to
14 it (column 3, lines 51-53 of Carlucci). Accordingly, the input processor 70 is clearly not
15 configured to receive a video signal from a storage medium, a video graphics processor,
16 and a video input system, wherein the video output system is communicatively coupled to
17 the storage medium, the graphics processor, and the video input system by electrical
18 communication paths (as recited in claim 1).

19 In attempt to remedy the above-identified deficiency in the Carlucci reference, the
20 Patent Office now applies the Spannaus reference. Spannaus discloses a single chip
21 module containing video rasterization functionality, graphic rasterization functionality,
22 and window identifier functionality. The Office Action apparently interprets Spannaus'
23 digital-to-analog converter (DAC) 280 as the claimed video output system (see Fig. 2 of
24 Spannaus). The Office Action points to various modules in Fig. 2 of Spannaus as
25

1 allegedly constituting the recited storage medium, the graphics processor, and the video
2 input system.

3 However, this combination of references is misplaced and fails to teach or suggest
4 the claimed invention. The purpose of Carlucci's apparatus is to receive analog signals
5 from a film scanner and perform processing on these signals. Since Carlucci is narrowly
6 tailored to achieving this goal, there is absolutely no suggestion that it would have been
7 obvious to expand its sources of input signals to include the kind of digital signals
8 processed in Spannaus' apparatus. Moreover, the various modules in Fig. 2 of Spannaus
9 supply digital signals to the digital-to-analog converter (DAC) 280, the output of which is 
10 an analog video signal. Since the signals feeding into the DAC 280 represent *already* 
11 processed signals that are ready for *output* to a monitor, there would be absolutely no 
12 reason to direct these signals to the *input* processor 70 of Carlucci's film scanning
13 processor 14 (which is designed to perform processing on input signals received from a
14 film scanner).

15 As stated in MPEP § 2143.01, obviousness can only be established by combining
16 or modifying the teachings of the applied art to produce the claimed invention where
17 there is some teaching, suggestion, or motivation to do so found either in the references
18 themselves or in the knowledge generally available to one of ordinary skill in the art. *In*
19 *re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). In the present case, there is no
20 such teaching, suggestion, or motivation. And, in fact, it is not even understood *how* the
21 apparatuses described in Carlucci and Spannaus *could possibly work together*. As stated
22 in MPEP § 2143.01, if the proposed modification would render the applied art invention
23 being modified unsatisfactory for its intended purpose, then there is no suggestion or
24 motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ
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1 1125 (Fed. Cir. 1984). For the reasons stated above, this would appear to be the case in
2 the combination of Carlucci and Spannaus.

3 The Applicant further submits that the Spannaus document, considered in
4 isolation without Carlucci, fails to disclose or suggest the subject matter of claim 1. *
5 Spannaus does not disclose or suggest a video output system that includes a receiver,
6 video pipeline, and a video output module, wherein the video output system receives a
7 video signal from a storage medium, a video graphics processor, and a video input
8 system.

9 For the above-identified reasons, the Applicant submits that claim 1 is patentable
10 over the combination of Carlucci and Spannaus.

11 Independent claims 23, 44, 52 and 57 recite related subject matter to claim 1, and
12 are therefore allowable for reasons similar to those specified for claim 1. Further, claims
13 52 and 57 further distinguish over the applied documents by reciting functions that the
14 video pipeline can perform. (Note that the first paragraph of the rejection based on <-
15 Carlucci and Spannaus does not identify independent claims 52 and 57, but the ensuing
16 explanation of the rejection does mention these claims. The Patent Office is requested to
17 clarify the basis for this rejection in the event that there are any forthcoming rejections).

18 The remaining claims rejected under 35 U.S.C. § 103(a) (i.e., claims 2-5, 9-21,
19 24-27, 31-43 and 45) depend variously from claims 1, 23 and 44, and are therefore
20 allowable for at least this reason. In addition, these claims recite additional features that <-
21 are not taught or suggested by Carlucci and Spannaus, whether these documents are
22 considered alone or in combination. For instance, claims 10-21 recite various functions
23 involved in the process of post-processing performed by the claimed video pipeline.
24 Again, the Office Action is interpreting the claimed video pipeline as either Carlucci's
25 digital signal processor 72 or Carlucci's A/D converter 102. Neither of these components

1 satisfies each of the combination of elements recited in the claims. For instance, with
2 respect to claim 10, the Office Action identifies column 12, lines 32-38 of Carlucci as
3 disclosing region of interest selection. Even if, assuming *arguendo*, that this passage
4 describes the subject matter of claim 10, this passage is describing the functionality of the
5 output processor 74, not the digital signal processor 72 (again, which the Office Action is
6 interpreting as the claimed video pipeline). With respect to claim 11, the Office Action
7 identifies column 6, lines 25-37 of Carlucci as disclosing frame rate matching. However,
8 that portion is describing functionality of the input processor 70, not the digital signal
9 processor 72. These are merely two illustrations of the deficiencies of the Carlucci
10 reference vis-à-vis the claimed invention.

11 For at least the reasons specified above, the Applicant respectfully requests that
12 the 35 U.S.C. § 103(a) rejection based Carlucci and Spannaus be withdrawn.

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14 *Withdrawal of the Rejection Under 35 U.S.C. § 103(a) Based on Carlucci and*
15 *Olarig is Appropriate and is Respectfully Requested.*

16 Claim 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over
17 Carlucci in view of U.S. Patent No. 5,937,173 to Olarig et al. (referred to below as
18 "Olarig"). Applicant respectfully traverses this rejection for the following reasons.

19 Claim 22 depends on independent claim 1, and is therefore distinguishable over
20 Carlucci for at least this reason. Olarig also does not disclose the subject matter of
21 independent claim 1 identified above. Therefore, Olarig does not make up for the
22 deficiencies of Carlucci, whether considered alone or in combination with Carlucci. The
23 Applicant therefore respectfully requests that the 35 U.S.C. § 103 rejection based
24 Carlucci and Olarig be withdrawn.
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1 In any event, it is assumed that the Patent Office intended to also include the
2 Spannaus reference in the rejection of claim 22; if there are forthcoming rejections, the
3 Patent Office is requested to clarify the basis of this rejection. (Even with the inclusion
4 of Spannaus, the Applicant submits that the combination of Carlucci, Spannaus and
5 Olarig fails to teach or suggest the subject matter of claim 22).

6 For at least the reasons specified above, the Applicant respectfully requests that
7 the 35 U.S.C. § 103(a) rejection based on Carlucci and Olarig (and Spannaus) be
8 withdrawn.

9
10 *Withdrawal of the Rejection Under 35 U.S.C. § 103(a) Based on Carlucci and*
11 *Kostreski is Appropriate and is Respectfully Requested.*

12 Claims 46, 47, 49 and 50 were rejected under 35 U.S.C. § 103(a) as being
13 unpatentable over Carlucci in view of U.S. Patent No. 5,734,589 to Kostreski et al.
14 (referred to below as "Kostreski"). Applicant respectfully traverses this rejection for the
15 following reasons.

16 Claim 46 (and related claim 29) recite that the receiver and the video pipeline are
17 implemented as an integrated video processing module, and that the video output module
18 is detachably coupled to the video processing module. As referenced in the Office
19 Action, Kostreski discloses a network interface module 101 that takes the form of a plug-
20 in module, similar to a daughterboard or option card which can be plugged into a back
21 plane of a personal computer (column 9, lines 1-4 of Kostreski). While Applicant does
22 not contend that daughterboards are novel *per se*, the use of a detachable coupling
23 arrangement in the context of the claimed invention is non-obvious over the applied
24 references. For instance, the Office Action is interpreting Carlucci's output processor 74
25 as the claimed video output module. Carlucci's output processor 74 is shown in Fig. 2

1 as being a functional component within a film scanning processor 14. There is no
2 suggestion in Carlucci that it would have been desirable or obvious to make any
3 component within the film scanning processor 14 separate but detachably coupled to the
4 remainder of the film scanning processor 14. Further, Kostreski's network interface
5 module 101 provides connection to a particular type of network, and therefore is not
6 relevant to the film processing technical environment associated with Carlucci's film
7 scanning processor 14. Further, Spannaus emphasizes the use of "one monolithic module
8 containing all of its functions in one chip" (column 2, lines 32 and 33). It is therefore
9 clear that Spannaus likewise does not teach or suggest the detachable coupling of any of
10 its functional components.

11 Claims 47 and 50 depend on claims 26 and 39, respectively, and are therefore
12 allowable for at least the reasons given above for these claims.

13 The basis on which claims 48 and 51 are rejected is not clear from the Office
14 Action. It is assumed that the Patent Office intended to reject these claims based on the
15 combination of Carlucci, Spannaus and Kostreski; if there are forthcoming rejections, the
16 Examiner is requested to clarify the basis of this rejection. With respect to these claims,
17 the Office Action states that "it is well known in the art to inform of a configuration of
18 any detachable module to the main processor (CPU common on the mother board) so as
19 to make and utilize an operational piece of hardware/software" (page 6, second paragraph
20 of the Office Action). The Applicant traverses this rejection because there is no support
21 in the record for the conclusion that the identified features are "well known." In
22 accordance with MPEP § 2144.03, the Examiner must cite a reference in support of the
23 Office Action's position. Moreover, Kostreski actually discloses that a digital signal
24 processor (DSP) of the network interface module 101 is controlled by the functionality of
25 the digital entertainment terminal (DET) 100 that it couples to (see column 9, lines 13-

21); this is the opposite of what is being recited in claims 48 and 51; that is, these claims recite that the video output module includes a processor that is configured to inform the video processing module of its configuration, not the other way around.

Likewise, the basis on which claims 53-56 and 58-61 are being rejected is not clear. Presumably, these claims are being rejected under 35 U.S.C. § 103(a) based on Carlucci and Spannaus; if there are forthcoming rejections, the Examiner is requested to clarify the basis of this rejection. Insofar as these claims recite subject matter found in prior claims, the Applicant respectfully traverses this rejection for the reasons provided above.

Moreover, claims 53-56 and 58-61 further distinguish over the applied documents. For instance, claim 53 recites that the video pipeline is configured to perform plural of the nine functions identified in claim 52, while claim 54 recites that the video pipeline performs *each* of the nine functions identified in claim 52. The Office Action is interpreting the claimed video pipeline as Carlucci's digital signal processor 72. This component, as shown in Fig. 5 of Carlucci, includes three functional modules: noise reducer 80; color processor 82; and image enhancer 84 – not the nine functions recited in claim 54. Claim 56 adds yet further elements to this combination by specifying the functions that can be performed by the video output module. Rejection of this very detailed claim highlights the unjustified stance currently taken by the Patent Office.

For at least the reasons specified above, the Applicant respectfully requests that the 35 U.S.C. § 103(a) rejection based Carlucci and Kostreski be withdrawn.

Conclusion

In conclusion, the Applicant respectfully requests that all of the rejections based on 35 U.S.C. § 103(a) be withdrawn.

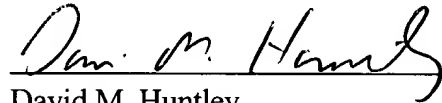
1 As a final matter, to clarify the record, the arguments presented above are not
2 exhaustive; Applicant reserves the right to present additional arguments to fortify its
3 position. Further, Applicant reserves the right to challenge the prior art status of one or
4 more documents cited in the Office Action.

5 All objections and rejections raised in the Office Action having been addressed, it
6 is respectfully submitted that the present application is in condition for allowance and
7 such allowance is respectfully solicited. The Examiner is urged to contact the
8 undersigned if any issues remain unresolved by this Amendment.

9
10 Respectfully Submitted,

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12 Dated: April 8, 2004

13 By:



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